



UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899

September 28, 2007

Mr. Morgan Reynolds
26 Alta Way
Hot Springs Village, AR 71909

Dear Mr. Reynolds,

This letter is in response to your letter pursuant to Section 515 of P.L. 106-544 (the Information Quality Act) that the National Institute of Standards and Technology (NIST) received on March 8, 2007 and the supplement to your letter received on May 1, 2007.

Your letter makes two major assertions that you believe constitute a violation of the information quality standards. The first of these assertions is that the video and photographic data used by NIST in its analyses of the World Trade Center Towers fraudulent evidence. The second major assertion made in your letter is that the analyses conducted by NIST violate the laws of physics and further that the results presented by NIST are not independently verifiable and do not have a scientifically valid basis for making the assumption that the simulated conditions could have actually occurred. These assertions are addressed individually below.

With respect to your assertion that the photographic and video evidence used by NIST in its investigation of the WTC Towers is fraudulent, your letter suggests that NIST failed to interview and document the photographers of each video, chain of custody, and failed to investigate to insure no manipulation of pixels. NIST collected photographs and videos from original sources only (e.g., professional and amateur photographers, news media). In most cases, a NIST expert met with the individual photographers or with media outlets and copied original source material and transferred that material to NIST for analysis. Thus, photographic and video evidence came to NIST directly from the original sources. NIST documented the source of all photographs and videos cataloged and used by NIST in the investigation. In many cases, NIST spoke with the photographers to determine their location as they photographed the World Trade Center, and observations they had of the events of September 11, 2001. By using original sources of photographic and video evidence and by using a NIST expert to obtain copies of material directly from these original sources, NIST was able to ensure the integrity of the photographic and video evidence used in the investigation. Further, all photographs and video records obtained by NIST are kept on a secure server with access limited only to authorized NIST personnel. Therefore, your request that NIST acknowledge that fraudulent evidence was used in the investigation is denied.

In your letter, you also assert that NIST violates information quality standards by positing phenomena that violate elementary physics. Your letter implies in item 4 that aircraft did not impact the WTC Towers and goes on to suggest that the sequence of events are not

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independently verifiable and there is no scientifically valid basis for making the assumption that simulated conditions could have actually occurred. The evidence: eyewitness accounts, photographs and videos independently taken by amateur and professional photographers, clearly establish that the buildings were impacted by Boeing 767 aircraft. The total body of evidence supports the sequence of events from aircraft impact to initiation of collapse as reported by NIST.

With respect to your assertion that NIST's aircraft impact analyses violate elementary physics, the analytical models used throughout the investigation are based on widely accepted principles of structural and solid mechanics, fire behavior, and thermal analysis. The interaction of the aircraft with the building structure during impact is very complex, including not only momentum and energy considerations, but also the deformation, fracture, and failure of the materials present in the WTC Towers and aircraft. The models used to analyze the aircraft impact into the towers fully capture the constitutive properties of the aircraft and the building materials and account for the deformation, fracture, and failure of these materials as well as conservation of momentum and energy. Both the aircraft and the towers included deformable components and materials, whose interactions were properly accounted for in the models. As a result, the aircraft would not be expected to decelerate immediately upon impact with the exterior wall of the tower. NIST has fully documented the modeling approaches used, assumptions that were made in constructing the models, and uncertainties, as well as the results obtained from the models. The analytical modeling methodologies used by NIST were reviewed by individual subject matter experts who also serve on the National Construction Safety Team Advisory Committee and by experts retained by NIST as consultants. These individuals have all agreed with the approach taken by NIST to analyze the aircraft impact, fire growth and spread, and structural behavior under thermal and structural loads. Finally, because of the large amount of independent photographic and video data available for the World Trade Center Towers, NIST was able to compare its analytical results with the observable data to verify that the models accurately captured the observed behavior of the WTC Towers. Based on the above, your request for change on the basis that NIST simulations violated the laws of physics is denied.

Your letter does point out a typographical error that is present in Table 2-1 of NCSTAR 1-5. The correct length of time necessary for the aircraft to fully penetrate WTC 1 is 0.233 seconds (refer to NCSTAR 1-5A Chapter 6.3 on page 61). The same typographical error appears in Table 6-1 of NCSTAR 1-5A as well. NIST has issued an erratum to correct this error in both reports. The erratum <http://wtc.nist.gov/oct05NCSTAR1-5index.htm> is posted to the NIST WTC web site at and is attached to this letter.

In the supplement to your letter, you assert that Science Applications International Corporation (SAIC) had a clear and palpable conflict of interest that adversely affects the quality and integrity of the work done by SAIC for NIST. You further request that NIST correct NCSTAR 1 to disclose the extent to which SAIC is involved with defense contracts, intelligence contracts, directed energy weapons, payment of court ordered fines and psychological operations, as well as acknowledge that undue influence may have been a factor leading to the false, misleading, deceptive, and fraudulent conclusions that

you assert were reached and publicized in NCSTAR 1. SAIC was contracted by NIST to provide administrative support to the team conducting the investigation. They did not perform technical work in support of the investigation. Further, though NIST worked with contractors to perform technical work in support of the investigation, all of the findings and conclusions reported in NCSTAR 1 were solely NIST's. Thus, neither SAIC nor any of the other contractors working in support of the investigation formulated the findings reported. As stated above, NIST's analyses were very carefully performed to ensure that the physics were correct and the results validated against the visual data. Therefore, your request for change to NCSTAR 1 is denied.

An appeal from an initial denial must be made within 30 calendar days of the date of the initial decision. Such appeal must be made in writing and addressed to:

Deputy Director
National Institute of Standards and Technology
100 Bureau Drive, Mail Stop 1000
Gaithersburg, MD 20899-1000

An appeal of an initial denial must include:

- a. the requester's name, current home or business address, and telephone number or electronic mail address;
- b. a copy of the original request and any correspondence regarding the initial denial; and
- c. a statement of the reasons why the requester believes the initial denial was in error.

Thank you for your interest. If you have questions or concerns, you may contact me at info.quality@nist.gov. Please refer to http://www.nist.gov/director/quality_standards.htm for additional information.

Sincerely,



For

Catherine S. Fletcher
Chief, Management and Organization Division

cc: Jerry V. Leaphart

Erratum

**Reconstruction of the Fires in the World Trade Center Towers (NCSTAR 1-5)
Page 9, Table 2-1, Line 3 and
Visual Evidence, Damage Estimates, and Timeline Analysis (NCSTAR 1-5A)
Page 55, Table 6-1, Line 3**

Original:

In the third line of the table, the time at which the tail of the aircraft disappeared into WTC 1 is given as 0.2 s.

Correction:

The correct time at which the tail of the aircraft disappeared into WTC 1 should be given 0.23 s

The table appears in both NCSTAR 1-5 and 1-5A as noted in the title above. This change corrects a typographical error in the table and makes the table consistent with the text of Section 6.3 of NCSTAR 1-5A (page 61) which discusses the calculation of aircraft speed based on a simple analysis of video of the aircraft impact.